

HOME COMPUTING WEEKLY

AN ARGUS SPECIALIST PUBLICATION

July 22-29 1985 Vol 123 30p



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"Pirate's days are numbered"

British software houses have gone mainstream thanks to the new legislation that makes software theft and piracy illegal.

The controversial consensus view is that the industry can cope with the backing of the law and the sponsorship of the Federation Against Software Theft (FAST). Educational Co-ordinators, as reported in last week's HCW, carry out a concerted campaign to track down and prosecute the software pirates.

William Powell, the MP who introduced the Copyright (Computer Software) Amendment Bill spelled out the message loud and clear for the software 'lawbreakers': "Your days are numbered," and the Commons law member Lord Cope, "and anyone involved in piracy must stop now or they will be punished. It takes a day until they are put out of business."

Before that, the former Metropolitan Police Superintendent who helped run the criminal agency during the British Embassy siege, where one Paul A. Balcomb (Computer) stated, "People must be educated to realise that if home

copying is widespread the industry will be in danger of disappearing."

Mark Pagmont of A and F software said, "I'm delighted. The Act is a very good thing for the whole industry and it lets us take the pirates through the courts knowing that the law is established and fair."

Members are extremely united as time wastes against individuals connected with software piracy. A spokesman for them said: "We have been actively involved in this campaign with GOSH (The Guild of Software House) and we wholeheartedly welcome the Act."

Richard Turner, managing director of Arcor who have made a hard line on software piracy, commented, "I think the new law is a step in the right direction." Arcor was responsible for bringing software houses together to present a counterbalancing ring in 1983 from opposing by issuing a joint statement. "Obviously this legal procedure is just a lot easier because you don't have to prove your point in law," added Richard.

The facts were what copywriters



Robert May of FAST

would be made aware of the fact that he is not only committing an offence but also contributing directly to the decline of the industry.

This point was graphically illustrated by Nick Alexander of Virgin Games who is a member of the board of FAST.

"A year ago there were 500 software houses. Today there are around a hundred. Piracy is a major factor contributing to this situation."

Those who are involved in home copying should be thinking of their own futures as well as the industry's because in many cases they are involved. Many of the programmers who do home-copying will be looking for employment in the industry. When they start ringing round the software houses for jobs as programmers they will find there is only a fraction of the jobs that used to be there. People who copy are cutting off their own nose to spite their face.

M.U.D. larks from BT

British Telecom's new interactive game let U.D. wander dromedaries and lashed in the HCW show in September.

The M.U.D. Dungeons is a fantasy based adventure game that has players interacting both with each other and with the computer. Although the game will be launched in the show and the charmingly named M.U.D. packs will be on sale—the game proper will not start until November 5.

Before then purchasers of M.U.D. packs will be able to use the system free of charge. Normal charges are

in units of ten minutes, each with coming 3p, which makes an hourly charge of 25. Early users will be able to use the system until 3 November with only three period charges to consider.

The game was devised by Roy Trubshaw and Richard Bartle and has taken them five years and 50,000 hours to develop. Originally available at Essex University and via CompuLink, the new version has three times as many locations as the original and a new set of one figure modules who provide the level making the more difficult.

Firebird's
Time capsule
in Orbit p.33

Easy Amstrad
Machine code
p.36

Fly High
with our C64
game p.9

Beat the Bookie
with your Spectrum
p.31

Up to the minute—
six pages of
software reviews
p.14



WATCH OUT! IT'S



DYNAMITE DAN

94%
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Smash

"What makes the game is the graphics – large, witty, bizarre and beautifully animated... each screen has something remarkable, and horribly difficult puzzles... Dynamite Dan is not just another Miner surrogate and is at least as essential to your collection."
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HOME COMPUTING WEEKLY

Soapbox

We recently received a letter from Mike Roberts who reads for HCW in New Zealand. He says the magazine three months after start of our readers but he isn't complaining about that!

He has written to tell us that we reviewed Amstrad's Chipper Squad twice in HCW's 100 and 105. Oh dear! He also informs us that we give the same game different ratings and asks us to think on that matter.

I have been thinking about this very subject for a few weeks now and here's the solution.

All the reviews in HCW are written by independent reviewers, a number of whom were readers of the magazine before they started to write to us. This means that they are writing for computer enthusiasts for compact entertainment.

When a doesn't mean a does the same game will be given the same rating by two different reviewers, as happened with Chipper Squad. Reviews aren't subjective they need to be subjective.

When appeals to one reviewer may not appeal to another, perhaps then, both having similar game reviews (Yes, we do send software games to software enthusiasts and arcade games to arcade players.) What I wouldn't expect is one reviewer to rate while another falls asleep. What our broad spectrum (get it?) they will give you the lowest opinion based on hours of experience.

What more could anyone wish?

Dave

July 23-July 29, 1985 No. 122

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- Bright Sparks for the C64
- Bentley's MICROCOM reviewed
- Plus — news, letters, competitions and ... more



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M.U.D. is...

the boy from
Walthamston



01-608 1173

British Telecom Ltd

Software Update

What a lot we got this month!

To be honest a number of the titles won't be released until the Autumn and that usually means the Personal Computer World Show in September. This is usually the case with the Adventure titles which are detailed here.

Quite a range they are too. I can't really understand why the C64 should have the American Road Race and the Spectrum the European one but I suppose there is a certain logic to it.

As we mentioned last week, the sequel to Dragonscore, itself a sequel to Avision, is to be called Asco-Clock after a last minute name change. But Mando won't be waiting for Dragonscore and the new game. Instead you can thrill in the robot's planet and the 21st cen-

tury Battle Wavens. The game is due for release in early October.

Meanwhile, that spy proof software house from north England, has announced two new titles for last release. Nightshade has you wandering around a lost village trying to lift an ancient curse and thereby release the poor hapless prisoners. Blackwyrie is another of the Arditi Productions adventures in which you find yourself in an evil ship. Perhaps it's something to do with all this conspiracy art!

Finally, Mando are looking to increase the interest in the Asco machines with a whole lot of new BBC and Electron adventures. They seem to be well priced and should please users of these computers.

Title	Machine	Price	Publisher
American Cross Country Race	C64, Atari	19.95	Arditi
Tour de France	C64	19.95	Arditi
World Championship Racing	C64	19.95	Arditi
European Cross Country Race	Spectrum	19.95	Arditi
Mont Stenis	C64, Atari, Specc, Atari	29.95	Arditi
Secret On Paradise	C64, Atari	29.95	Arditi
Shades	C64, Specc, Atari	29.95	Arditi
Shadow of the Bear	Amstrad	11.95	Amstrad
R. Rex Ballon 24h	Amstrad	12.95	Amstrad
Chombarri	Atari (Disk)	24.95	Arditi
Shadow of the Unicorn	Spectrum	24.95	Mando
Overgrown a Wally	Amstrad	24.95	Mando
From Class	Spectrum	9	Mando
Uggs Attack	Amstrad, C64	11.95	Arditi
Wicket Overload	C64	12.95	Arditi
Unlucky Prisoner	Spectrum	11.95	Arditi
Seven Seas	Spectrum	12.95	Arditi
Blackwyrie	C64	19.95	Udman
Nightshade	Spectrum	19.95	Udman
Magnum	Spectrum	21.95	CBI
Wanted	C64 (Disk)	22.95	CBI
Highway Encounter	Spectrum	12.95	Syrus
Adventure New York	Spectrum	12.95	The Edge
Footstep	Spectrum	12	The Edge
Wintery	C64	19	The Edge
Colibri	BBC/Electron	18.95	Shards
Fast Highway	BBC (Disk)	11.95	Shards
Wendover Road	BBC/Electron	12.95	Shards
The Last City	BBC/Electron	12.95	Shards
Operation Delta	BBC/Electron	22.95	Shards
Golden Road	BBC/Electron	18.95	Shards
C	Amstrad	12.95	Shards
Adm Wind Performance	Spectrum	12.95	Colibri



M.U.D. is...

01-608 1173



"the host in the machine"



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www

Submitted: 11 May 2006; Accepted: 11 May 2006
Published online: 11 May 2006

Young's most successful campaign-to-date, the Florida, was designed as an anti-gay lawsuit battle and lawsuit, and is said to be selling at the rate of 10,000 a year — priced at \$19.95 each. **W.A.B.**

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Warwick School was so deeply delighted with their busy and profitably passed in having booked as was to do top from the original four hundred yards.

The first two days of the show will be reserved to trade and business only. Admission for the general public is £2. Tickets available in advance from PCW Show, 81 Manchester St, London, W1D 1AG.

PCHE, German Engineering Unit
 89/90, 8-10 Walling St., London
 W1R 3AL, UK

[illegible]

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26



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HIGH FLYER

Was rapid firepower enough?



A real micro-adventure for the C64 by Gavin Adair but even bacteria can learn large and lethal on this Lifflup scale.

Vindicator are a very small race of beings which come from CERES III. Although their construct measures only 1 of a millimeter they are highly intelligent. When they die, they live for only seven seconds, the Vindicator turn into ghosts and then travel to earth where they spend thousands of years exploring earth's solar atmosphere before returning to begin their phase.

Nathan was one such Vindicator. One day, while he was exploring, he was attacked by Ballbusts, a small form of

bacteria which has the power to change shape. If Nathan touched any of these Ballbusts, they would make him "non-existent". The only way Nathan could escape being made "non-existent", was to collect three non-energy power crystals.

These would cause the Ballbusts to change shape, and because the Ballbusts could only change shape six times, if Nathan could collect six power crystals, the Ballbusts would overload themselves and die.

Features of the game include four way scrolling and hiding character set.

Controlling your Vindicator

The game uses a joystick to aim your Vindicator.

When the joystick is pushed in the desired direction, the screen will scroll around the ghost in the middle of the screen. If anything touches it apart from the crystal, you will lose one life, however the crystal phase timer will cause you to move on to the next screen.

Intelligence

Sometimes, the Ballbusts will, suddenly, take the crystal phase timer and cause you to move on to the next screen.

1 You will see no crystal on the screen.

2 You will see part of the crystal behind a Ballbust.

Reaching the crystal is easy, you attack one of the Ballbusts (by pressing 4). This will cause the Ballbusts to release their footage.

Options

When the title screen appears, you will have three options.

- 1 To change the number of lives during game, by pressing the space bar to a maximum of six.
- 2 To choose which level the game will begin on, by pressing CLR / HOME. Up to level two.
- 3 Begin game.

Hints on play

A good score is anything above 25,000. Here are getting good scores below.

- 1 Practice pointing the screen so as full ability. This can be done during the title screen.
- 2 Wiggle the joystick as fast as you can in a circle during play, this will slow your speed down.
- 3 When you are about to give once a new screen, there will be a short delay. During this delay, it is a good idea to push the joystick in the opposite direction that you were travelling before you collected the third crystal.




```

478 GOSUB 10000
479 GOSUB 400
476 GOTO 500
480 PRINT "CLEAR?"; IF POKES3261,64V=53240:POKEV+27,230:POKES3265,PEEK(53265):AND23V
  IL=3
484 FOR I=81024:POKES4272+1,B: NEXT
485 GC=10000:GX=10000:POKEV+30,B:L=B-5:FOR I=1 TO 204
486 POKES4277,120:POKES4275,120:POKES4284,120:POKES4285,120:POKES4276,33
487 POKES4283,33
490 PRINT"
500 NEXT
505 PRINT"
506 FOR I=81024:POKE I&3+6,1&B:POKE I&3+5&272+6,B:B=B+6B: NEXT
510 PRINT "HOME?";
520 PRINT"
  C P30c P30c P3 "
530 PRINT"
  (BLACK:RVSORTIC H3"
540 PRINT"
  (RVSONIC(BLACK) Cc P30c P30c P30c P30c P30c
  C Y30c Y30c Y3 "
541 POKEV+16,3:POKEV+2,12:POKEV+3,70:POKEV+30,253:POKEV+40,1:POKES441,230:PRINT
542 PRINT"
  (RVSONIC(BLACK) =PL:PRINT
543 PRINT"
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  C P30c P30c P3"
556 PRINT"
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557 PRINT"
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  C Y30c Y30c Y3"
558 PRINT"
  (RVSONIC(BLACK) "
559 PRINT"
  (RVSONIC(BLACK) "PL:POKE1937,176
560 PRINT"
  (RVSONIC(BLACK) "
561 POKES3265,PEEK(53265):OR 16
562 PRINT "HOME? (DOWN)"; V=53240:POKES4096,15:POKES4276,33:POKES4283,33:RESTORE
563 POKEV+6,120:POKEV+1,137:POKES2846,230:POKEV+29,1
566 POKES3265,PEEK(53265):AND23V
561 FOR I=81024
562 B=INT(RND(6))+255
563 POKEV+30,B: IF PEEK(V+30)<24 THEN V+1
564 POKEV+1,B:POKES79+1,B: NEXT:POKEV+23,B:POKEV+29,B:POKES3265,PEEK(53265):OR 16
565 POKES2842,230:POKES2843,232:POKES2844,232:POKES2845,230:POKES2846,230
566 POKES2847,241:POKEV+20,124:POKEV+30,B:FOR I=1 TO 44:POKEV+1,1: NEXT:POKES4276,15
568 POKEV+47,3:POKEV+29,96:POKEV+33,76:POKEV+21,224:POKE198,B
569 PRINT "HOME? (DOWN) (DOWN) (DOWN) (DOWN) (DOWN) (DOWN) HIGH FLIER";SPS4000
  B
569 PRINT "DOWN" WRITER BY SAPHI ADRS";SYN40000
569 PRINT "DOWN" JOYSTICK IN PORT TWO";POKEV+30,B=1
561 PRINT "DOWN" (BLACK:PRESS FUNCTION";SYN40000
562 PRINT"
  (RVSONIC(BLACK) "POKES46,C
563 PRINT"
  (RVSONIC(BLACK) "

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[illegible]

SOFTWARE



Desert Runner

This is a new release on the Spectrum range of budget software, and quite a good one too.

The game places you on a winding-up motorway as you race across a desert highway in an attempt to deliver some top secret plans. The highway, however, is far from deserted; there are helicopters and planes of opposing traffic to avoid. But your job is equal to the task, armed with weapons and able to jump over obstacles. You must shoot down the helicopters, while at the same time avoiding these bombs and keeping the obstacles in the road.

Oh, so it's not the most original of games, but it is quite nicely done and difficult enough to keep you at it day in, day out. I should think the graphics are reasonably good, and the scrolling highway is quite smooth, although there are quite a few screen glitches. There are two different highways you can play on, and a score feature of the game is a process mode which enables you to play the game with the collision detection on the road obstacles turned off.

One small criticism — the graphics in the action and explosions are pretty poor, and not a bad example for the children that the game is presumably aimed at.

I'm not sure that this game is one that will hold your attention for months and months, but it is still good value and is good, at some times, impressive game I've seen. C.A.

Price £2.50

Publisher: Creative Sparks

Address: Thomson House, 266 Parkborough Rd., Parkborough, Notts.



Frank Bruno's Boxing

It could be argued that this is a simulation rather than a game, because all the movements made by a boxer can be controlled from your Spectrum, and what you see on the screen in terms of a 3D ring etc. is exactly what you get. You just sit to plot Frank Bruno through eight bouts against increasingly more opponents.

The graphics are not been in the Ultimate sense, but are good enough to show the controls clearly, movement is swift and smooth. The bouts are short from the start up, and your viewpoint is over Frank's muscular shoulders. From here you can duck, weave left and right with guard up or down, and deliver left, right, uppercut and knockout punches.

Control is not too large or, for most people, a joystick, but on wrestling with this for half an hour, I discovered that the joystick merely supplements the keyboard by controlling movement, while you punch the keys. Cleverer construction please!

The first opponent is the Canadian Crusader who is supposed to be slow and lumbering, but a further 30 minutes' play still left me defeated. When you beat him you are given a code which allows you to load the code for the next boxer. Sadly, the review copy wouldn't let me cheat, so I can't tell you about Karim Mahfouz and all the rest of the gang.

Challenging, well presented, and on the uncommon, should keep you busy for a long time. Thrills and addictions. D.M.

Price £6.95

Publisher: Elite

Address: Anchor Hts, Anchor Rd, Aldridge, W Midlands



Hard Hat Mack

Hard Hat Mack has been nominated for the CPGAid from a good selling program which made a great name for itself — Bowside Bowyer. Bowside probably played the obvious prospect, as it is, this version is usually impossible to play, because the controls just do not do what they should.

Hard Hat Mack is yet another game involving lifts and pulleys, although at least the controls are fairly intuitive. The intense task place on a construction site and the people around him is to complete the building on each of the three separate stages, and in a multitude of different difficulty levels. All I have actually been able to do so far is to watch the clock screen, and very little, and colourful they are too.

There are, naturally, very tricky levels at large. These include a group of vehicles, and a character called Ocho, who roams around with a clipboard, while the Mack keeps around rather idiosyncratically, with the controls failing to function. For a start, nothing works unless SHIFT is pressed, which makes Mack jump at whatever way he is facing. Up and down movements don't work either, the only key that does work being the DELETE to pause play. Sadly, the ESC key which should reset merely stops out the current game.

No, if Amstrad's control sheet with elementary things as controls, they are going to have problems. Some of us have broken joysticks, and have to fiddle with the keyboard and even so, the task I have seen wouldn't make me go back for any more!

P.E.

Price £8.95

Publisher: Amstrad

Address: Scott 100/6 Anshute Hse, Palmer St, London SW1E 1HS



OPERATION



CARETAKER

Operation Caretaker

Oh, oh, I take it all back. In a recent issue I had quite heavily said that this, which is intended to be a sort of chaotic player maintenance kit.

Held on though, on second thoughts, I'm only prepared to take back some of the things I said about it. Overall, some of my criticisms about the instructions and frustration of the package weren't entirely justified. On the other hand though, my criticism of the program which will save countless players' precious algorithms was justified.

At the time, the algorithm program seemed that my angry and reliable cassette player (which has never given me the slightest loading problem) was a bit of a wreck and thoroughly unreliable.

It seems that Global Software have accepted their criticism at heart, for they have now reprogrammed as well as some revised, slightly modified and considerably more accurate, so far as I can tell.

The designating/reading/closing up is a terrible nuisance, as is the correction for skipping the head on the cassette player. But now, the algorithm program, instead of registering was inaccurate in the way the numbers read, clear and giving it an "ugly" rating, gives a very low error rate and a "Good" rating. This means more accurate playing by my past experience with the player, and I now feel that the kit is more useful than before. It might now be an unnecessary expense if you don't have loading problems at the moment, but in the long run it could be a very worthwhile investment. C.J.

Price: £9.95

Publisher: Global Software

Address: PO Box 67, London SW11

SPECTRUM



St Crippens

Despite its novel setting, this is really a fairly dated type of maze game. Set in a hospital, you are a patient looking for your clothes so that you can leave the hospital. The between you and freedom are the nurses, parents and a few monsters thrown in for good measure (and kept out for the bedpans and polluted floor mats).

To find the clothes you must make your way through all the wards whilst the hospital staff chase you around the beds. It's all fairly standard stuff, although the hospital setting is rather novel and makes the game seem a bit more original than it really is. The graphics are fairly basic — all the movement figures look like stick insects and appear to be made up of just one or two UDAs. The dialogue doesn't do it in its respect as you can be injured (you don't lose lives, just status) and at times when it actually looks as though you and your partner haven't quite come into contact. Even so, I still found the game enjoyable for a short while, and it was only the fact that I couldn't seem to find any clothes together that caused me to put it on the shelf.

It's a pity that the graphics are so unimproved, since with better graphics and slightly more responsive controls, it would make a decent enough budget game. C.J.

Price: £2.50

Publisher: Creative Sparks

Address: Thomson Bldg, 294 Farnborough Road, Farnborough, Hants

SPECTRUM



Jump Jet

Software houses are always searching for new versions of existing themes. With "Jump Jet" Amstar have taken the ever-popular flight simulator program and altered the scenario to that of an aerial cat's.

As the game begins you select the skill level you wish to play in from the five levels, rated Pilot to Group Captain. The skill level affects the weather conditions — the flight instructor has no need of waves to help him, the group captain has equipment too and a sturdy resistance.

The screen is used to give a split display, the bottom half always shows the instrument panel, the view displayed on the upper half varies with increasing height. Upon take off there is a bird's-eye view of the jet gaining height. Above 5000 the view changes to head-on and tail-on viewpoints of the carrier and jet. Finally as you climb above 10000 the view is of sky and no computer with waves and clouds.

The graphics are nothing spectacular. When being attacked by an enemy fighter, your only indication of approaching doom is a white circle which appears on the front of the enemy plane, this slowly grows in size. Having grown to a certain size the screen goes blank and there is a bang, a message on the screen that informs you of your termination.

The program also claims to make use of Amstar's compatible speech synthesiser, the only drawback that I detected were completely unrecognisable.

Jump Jet would have probably have been classed as a good program when the Amstar was first released. However, today's Amstar software is of a much higher standard, consequently Jump Jet is decidedly average. L.R.

Price: £9.95

Publisher: Amstar

Address: 28 West Hill, Dartford, Kent DA1 2SL

AMSTRAD



Flipped



Hooked



Kean



Yawning



Comatose



Richard Adam's Towel

Here this is what I call software!

Packed on a wonderful soft case — this product is the first word in interactive programs. You can do so many things with this one.

Imagine flying in a Vegas spaceship without this pack. It has full colour display in either blue or mulberry, a colour not found on any other computers nowadays. What is so clever is that the media can be turned over and the colours, colours not for then again, are reversed so that it can be read in a mirror whilst still in use.

The storage capacity of this product is unsurpassed too. I have no other place of software that can hold as much typed or text without slowing half mile read/write degradation, and drags. At this is a real only product I can assure you that a can be read without error, whether wet or dry.

Other computer software cannot claim perfection but some can compete with this one. It is even special because you don't even need a computer to use it. It's use is enhanced by being close to a machine but this reduces the price to a simple, warm, product, the tactile and visual qualities need to be noted.

Another real difficulty is finding elsewhere that can interfere with this product. It is rather too large to fit into the average average computer and rather too floppy to fit a disc drive, there are no holes either. I expect this to be every-one's case. If the micro-computer industry can develop a unit that reads screen writers, the machine, why not towels? ■ E.

Price £12.95

Publisher: RH H Towels

Address: 35-38 Hayway Sams, London W1P 8DE

Machine: None



Morden's Quest

I'm almost embarrassed to review this adventure as I haven't been able to make much of a dig in it at all — despite spending most of the weekend playing it. Even so, Morden's Quest proved addictive enough for me to persevere with it, whereas I would have abandoned many other adventures in frustration by now.

A sequel, of sorts, to the earlier Classic Adventures published in a number of volumes by Melbourne House and others, this game begins with you waking in a familiar bedroom — a bedroom earned over from the earlier adventures. From here, you must find your way out of the presence of Morden, The Ancient One. The trouble is, that I haven't reached that far yet. In fact, to tell the truth I'm still wandering around a maze of rooms and corridors, hopefully lost of course, but enjoying every minute of it.

When this adventure is so successful as this it presents you with some really trying problems. However, rather than simply bring despairing, the game always makes you feel that the reward you're looking for is just around the corner.

This is a text only adventure, but I didn't miss the graphics at all. The game is fairly concise, and it's not the sort of game that allows you to run quickly from one location to the next, so graphics aren't really necessary. Old fashioned maybe, but vintage stuff nonetheless. C.A.

Price £8.95

Publisher: Melbourne House

Address: Castle Ford House, Castle Yd, Richmond, London



Catastrophes

A simple game, or so it seems. You have only choice of the company helicopter and all you have to do is fill building blocks from supply barges in the middle of the North Sea and use them to construct a building. But beware of the hazards awaiting you!

Low-flying aeroplanes frequently appear lowest on crashing into your helicopter, and waves are determined to stop you. Hurricanes, electric storms, earthquakes and floods all appear with startling regularity to undo your good work. It would be a wonder if they ever managed to find any North Sea oil, or about all it where, if the real world was like this.

The graphics are excellent. Day changes into night. Jagged lightning strikes down the screen before damaging your carefully constructed building. The sound effects are good and add to the atmosphere.

The program starts by letting you choose the level — amateur or professional, and setting your daily target. The professional level has higher targets but more lives. On the screen there are two main buildings and two helicopters. The one on the left man is demo mode while you can use either cursor key or preferably joystick to move the helicopter on the right. Your score depends on how many blocks you use. There are waves coming, and you lose score for every block lost due to the maniacs that build you.

And it proved rather predictable after a while. I found myself trying to destroy the aeroplanes by bombing them with blocks rather than bother to construct buildings to block the waves down. Which all rather a pity because, as I said, the graphics are very good. A.W.

Price £9.95

Publisher: Amsoft

Address: 146 Kings Rd, Brentwood, Essex CM14 4EP



Alex Higgin's World Pool

Anyone familiar with CDS Dave Davis Snooker will immediately feel at home with this program. It has been carefully designed to conform as far as possible to the rules of the English Pool Association, and having spent some time playing the real thing — ages of a me, some years — I can verify this.

For the uninitiated, eight ball pool has 12 balls, seven spotted, seven unspotted, and a black. To start a game each player takes a spot and one of them pockets a ball. If a spotted ball is pocketed then that player has to clear the rest of the spotted balls, and has opponent has to pocket the unspotted balls. The game is finished by pocketing the black. If the black goes down at any other time you lose the game. They can't it!

To start a game you have to place the white cue ball in the desired position within the 'D' at one end of the table. A large flashing cross appears on the cue ball to allow you to set the direction in which you want it to travel. You must then select the force you wish to exert, and the amount of spin — left, right, top or bottom. If that all sounds tedious then I assure you it isn't, it takes much longer to describe than to do! Then, with a little luck and a lot of judgement, one of the balls is speedily dispatched into a pocket.

With an option to use two joysticks, and Amstrad speech synthesiser compatible, this is an excellent program guaranteeing long hours of enjoyment. A.W.

Price £9.95

Publisher: Amsoft

Address: 146 Kings Rd, Brentwood, Essex CM14 4EP





Mr Smarty — Mental Arithmetic

This program operates four systems relating to the basic rules of number work — addition, subtraction, multiplication and division.

As the beginning a simple rule you to choose which arithmetic rule you want to use. After this you are asked to select the difficulty level. The player has then to answer a number of questions. A correct answer is rewarded. The rewards comprise of four animated pictures showing the scene of a bird, a cat, a dog, and a horse. On the screen he chooses a letter up to a dozen answers and then into a basket of water. In addition, he chooses a water. He then the picture of a bird, a cat, a dog, and a horse. He then the picture of a bird, a cat, a dog, and a horse.

This type of program is usually to enter and exit in a way to fall in. There are cartoonish, arithmetic programs on the market and for one didn't offer anything new. Also, an attempt was made to detect dishonesty of answers.

Unless you're using the straightforward approach to teach arithmetic, achieving the same common a number of times soon brings boredom. The degree of difficulty does not vary during any given level. A simple routine to increase or decrease difficulty depending on the user's performance would have been welcome.

To sum up, this program is not one I would recommend. There is nothing in it which would not be covered in school and the graphics are not a sufficient gimmick to hold a child's attention. **M.W.**

Price: £4.99

Publisher: Softschool

Address: 411 Haverly Road,
London M19



Abu Simbel

This is almost an obscure strategy platform game. Unfortunately I found it so difficult to play, and so frustrating that I very quickly lost all interest in it and, despite trying to persevere and give the game a fair trial, I eventually gave up and found myself galling out the power plug.

So as an Egyptian papyrus, the game requests you to rescue someone by the name of Johnny, and there's some sort of treasure hunt involved along the way too. The graphics are decent enough for a 16-bit system — quite large and detailed — though I'm not sure what the figure that you control was meant to be. It looks just like a black-on-leg, and with a city air.

But what I found so grating was the difficulty of getting through the rooms, past the various obstacles. The rooms available require such precise timing, and your margin for error is so slight, that getting through a room just becomes a matter of repeatedly attempting each obstacle until you've got the timing exact to a fraction of a second.

I realise that half the fun of a platform game is working out how to get through the rooms, but I simply found this game too difficult. After spending quarters of an hour on one level alone, only to eventually succeed and discover that the very next obstacle was just as hard, I gave up out of frustration. **C.J.**

Price: £7.95

Publisher: Games Graphics

Address: Alpha Hse., 18 Curver
St. Sheffield S14P5



On-Court Tennis

With Wimbledon fresh in people's minds, what better time to release On-Court Tennis. And since sports video lessons are all the rage at the moment, this should go down well.

There are plenty of variations built into the game. You can play on grass, hard or clay courts. There are four ways of play represented by John McEnroe, Bjorn Borg, Jimmy Connors and Ivan Lendl. Each has his own particular strengths — John has a great serve, John's best shot is his backhand, and so on. You pick one of these four, select for a few players or player versus computer game, of one, three or five sets.

However good a server you have picked, it's still up to you and the precision of a shot is. The ball is served automatically and moving the joystick triggers the swing. The direction you move at decides which direction a shot is, and holding the fire button down will power to the shot. That's it. And yes, the rally is a much more complicated affair.

The player automatically runs towards the ball and moving the joystick triggers the swing. But this time, the direction decides the type of shot, a top-spin, flat, lob or ordinary shot. You give a drop-shot. That takes a lot of practice, and there's even less relationship to tennis, then trying a joystick from side to side down to running.

The graphics are excellent, there's a nice animated interface between games and the accompanying instructions are detailed. Nevertheless, although I was impressed, I was far from enthralled. **B.J.**

Price: £10.99

Publisher: Activision

Address: 21 Welby Hse., Marylebone Rd., London NW1 1



Boulder Dash

As last month's games have a chance to play the classic game, which has been available for a selection of other machines for quite some time. The cartoonish is good, with attractive graphics and sound effects. My only small complaint is that you really need a colour monitor, as in some screens the boulders do not stand out clearly on black and white.

As you've already already know the game, instead of controlling a little man called Rockford who runs through caves collecting jewels and avoiding falling boulders. You have to collect a certain number of jewels in each cave before you can move on to the next. There are several difficulty levels and levels of difficulty, and you can choose where to start, within certain limits.

Movement is by joystick (the best option) or control keys. It is generally smooth, but every now and again the mouse seems to lag for a few seconds. This can be rather disconcerting, particularly if it happens when you are already underneath a boulder.

Success depends partly on speed and accuracy, and partly on careful planning, as well as the best plan. In some cases, there are deadly traps to be avoided, or boulders which can kill you, but can also be transformed into a pile of jewels with a well-timed boulder. There are also smooches, which are less dangerous but can be rather inconvenient if you're there for too long.

Plus, Boulder, may we have a controversy of the rapid run?

M.W.

Price: £5.99

Publisher: Orpheus

Address: Unit 1, The Smiley,
Church Farm, Haverly St George
Mr Smiley, Leeds





Graphic Designer

Many BASIC graphics-reference combinations, including some, arrive from a single firm; the narrow left-hand edge of the screen is not visible. Allowances are made for this in most commercial software, but not, regrettably, in this particular program. The menu of options is displayed at the left of the screen, and I was only able to see half of it. With only half a menu the program is not much use, so be warned, and do not buy it unless you can see the whole screen on your television.

The program is written mainly in BASIC, but uses some machine code routines. It is not brain-crushing, as you can hit it and exit it if required. You are given the line numbers of the picture (horizontal and vertical), as that they can easily be altered to suit a disc instead of cassette, and the instructions also tell you where you can insert a screen dump routine if you can manage to write one.

Two separate versions of the program are supplied, the second one being for those lucky people who have Sanyo light pens. Both offer the same facilities: drawing lines, boxes, circles, ellipses and triangles. Displaying a drawing on a different area of the screen, producing patterns with up-down and/or left-right symmetry, changing the colour of all or part of the picture, adding one and so on.

The parts that I could manage to see all seemed well enough, but I didn't see anything to justify the hefty price-tag. **M.M.**

Price £14.95

Publisher: The Electric Studio

Address: PO Box 96, Letchworth

LU8 2LP



Match Poth

One of the 'Maze Trainers' collection of supposedly educational games, this one is a variation on the sliding picture puzzle. After a very lengthy loading process, a menu offers a wide selection of pictures. There's a map of Britain, green rocks, spider's web, digital watch, racing car, and several more.

Once a selection has been made, moving takes place in a loop-print. This involves drawing into three vertical and horizontal columns which then scroll very smoothly down and across, respectively, leaving you with a real struggle to sort out.

On screen instructions then tell you what keys to press to achieve similar shuffling, but it's up to you to follow one which can be awful when! If you can do it in less than 30 moves you can try the 40 moves. For me this sort of thing has always been difficult, and I haven't improved any!

My prints are stored for, in fact, the program crashed with some just accessed, but keyboard control is irrevocably and inflexibly to suit your machine. The quality of the graphics varies from sound but uninspiring to rather fine.

I can't honestly say that I would regard this as any more educational than the original puzzle, but it could be argued to have some benefits in terms of abstract thinking and short-term recall. Even so I find it's very hard for children. However it is fun and cheap and the game concept does come from a popular strand of the market. **B.M.**

Price £1.95

Publisher: Mastertronic

Address: Park Lane, 111 Park Rd, London NW8 3TL



Poker

In this simulation you chance your life playing poker in a western saloon against one of the greatest players in town. You start with a \$1000 stake and it's up to you to win or lose. The rules are taught forward and well-explained at the start of play.

The game is several draw poker as that you are dealt five cards. You must assess them each and a preliminary round of betting commences until all players have called — in that's perfect an expert betting level. You may then exchange up to three cards. The game then commences with the normal second betting round until the winner is found. You must decide whether to bluff it out or fold.

There is an eight figure involved. Well, the human is there to offer advice if you feel the need. Whether the advice is a help or a hindrance is debatable. The computer will also advise you to sort your cards and choose those to be changed, should you wish to.

The graphics are quite simple as they are restricted to represent the cards held. To add to the atmospheric suitable phrases relating to the area of play and the wares of the opponents are displayed. The game runs in an amazingly slow speed and the option to speed things up didn't have much effect.

Overall a good, but not outstanding, poker simulation which plays a good game but unfortunately isn't very exciting. **M.W.**

Price £1.95

Publisher: Geknowth

Address: Old Pike Farm, 41 Gloucester Crescent, London NW1 7DS



The Hobbit (Disc Version)

When the Hobbit was first released for the Sinclair Spectrum one of its selling points was its graphics. When it was sequenced into the BBC, the graphics were lost due to insufficient memory. This has now been remedied with the arrival of the disc version for the BBC computer.

The Hobbit is recorded on both sides of the floppy disc supplied. A double-sided disc drive is not required to read the disc as the disc is a reversible one. Side two is accessed by removing the disc and turning it over before reinserting. Before you can play the game with pictures you must prepare your own picture disc. If you have 40 track drives then you will require two picture discs. If you wish to save your position then you must also prepare a save game disc. By now the game is becoming pretty heavy on disc usage!

The game can be played with or without pictures. Each time you run a new location the drive spins away and a new picture is loaded. From the spin the music begins and the picture and its accompanying text. This constant spinning of the disc becomes pretty tedious as the pictures are not all that good. Even when playing a text only game the program still accesses the disc. This has been used to provide more detailed descriptions of the places visited.

If you already have the tape based version of the game then I wouldn't bother making one to buy this one. **J.B.**

Price £17.95

Publisher: Melbourne House

Address: Castle Yard House, Castle Yd, Richmond, TW9 2DP

BASIC



SPECTRUM



SPECTRUM



BBC





Music Master

After the rather exciting Musical Master of the 4th, it isn't surprising to see the same musicians for the C16. As first champions, however, are weaker in speed, too much, leaving a sense that only two rudimentary notes are available. In fact, the programmer has only done a bit of work and stopped on the basic machine.

The concept is obviously the same as for the C14 version. With this program you can program two part music and tap in it like other words, the program is a sequence. The mode of entry is such that the time is measured by "playing" the keyboard. The duration of each note will therefore depend on how long you press a key. It is possible to add the notes by using word processor type commands to copy, delete and insert notes.

Naturally, you are able to adjust the volume to give different words. This can be achieved by adjusting the attack, decay and sustain of the notes. Using this software it's a variety of sounds can be obtained although the range is severely restricted.

One of the notes can be used to provide a backing track, and the preset rhythms are provided for this purpose. Once you've finished your manuscript, you can save it on tape or disc for further use at a later date.

The program is simple to use and comes with a detailed manual. Full details are given on how to incorporate your own in your own program and an extensive driver playing routine provided.

A.W.



Perfect Writer

Again from a slow stable of games, which is only one becoming important, the C16 has received little attention from the software houses. Due to the rather limited memory, the lack of screen software is particularly evident.

The program is from SuperSoft, who are happy to offer more screen possibilities. The first noticeable feature of the program is that it's only just in use, it's not. Having this in mind, it's a remarkably versatile word processor.

In common with most word processors in Commodore machines, this product overcomes the handicap of 40 columns by using horizontal scrolling. The width of documents is definable and the maximum document length is about two pages of A4. The normal editing commands are available allowing the insertion and deletion of text, the movement and copying of one block and the scrolling of text for a specified range.

Most options are available from an edit mode. One can toggle between the editing and control mode by simple use of the CTRL key. The basic formatting options of indenting and left justification are implemented along with the ability to reformat blocks of text. There are also a range of commands for the selection of display colour and the manipulation of the worksheet and line blocks. Considering its cost, this is quite a versatile product.

This is an easy to use, flexible, no frills product which, despite the RAM limitations in the C16, is a useful means of handling text. Great value for the money.

A.W.



Ampriffs

This clever piece of work is a menu whereby you can design your own multi-colored diagrams (graphics) in a sequence, for instance purposes, store them in memory, then draw it up then use them as a program of your own. With Ampriffs, you harness the power and speed of modern code without having to understand it.

In this two tape package, you get a simple BASIC program showing how to build in the use of the option, and the creation program. The former is good, and your space is utilised by using data statements with 14 clearly explained parameters, reminiscent of the BMDH command. The resulting document is quite fast. It certainly is as good as some only published games, though in reality it's not the same as the game. It seems to move up and down, with some hesitation and a hint of flicker.

The space creator (editor) is easy to use with a number of single letter commands to allow you to choose a grid size on which to work. Choose pens and sets, draw points all in mode 01, view your image in different ways, store it in memory, and execute it etc. I found it friendly to use.

Criticism? The manual, though clear, is terse. The program overrules the doc. I also then writing it, and have the old spelling error. You have only about 16K left for program. The game's labels contradict the manual, and the game is pretty. Satisfactory, but not cost saving.

D.M.



Monopoly

In the tradition of transferring well known board games such as Checkers and Scrabble to the computer, there is now an enhanced version of Monopoly. It has the usual features of wheel-of-luck for points, properties, virtual pennies for banking, and an opponent's program, mortgages, auctions, hotel building etc.

The screen is divided between a perspective view of the board with the pieces moving around it, and a window showing a detailed view of the square you are on. The second window shows the player whose turn it is and sends in the move it makes the relevant number of squares. Should the square you land on be up for sale, you have the option to buy if you decide to buy, or auction it. If you don't buy, the other players bid the property.

The usual six pieces are available for players and any combination of houses or complete players are available. Unlike the board game, you cannot actually hold your own property cards and therefore you need a good memory to recall who owns what. You can recall facts such as mortgages, credit, owner's list by pressing the relevant key, but this option is only available during your turn.

Overall this is an excellent simulation of a very good board game and is worthy superior to the other non-auction versions. The graphics are very realistic with good editing of the dice and scrolling of the Chance and Community Chest cards. Well worth a serious look.

M.W.

Price: £14.95

Publisher: Supersoft

Address: Winchester Hse, Chawton Rd, Winchester, Hants, Hants HA3 7SD

Price: £14.95

Publisher: Supersoft

Address: Winchester Hse, Chawton Rd, Winchester, Hants, Hants HA3 7SD

Price: £14.95

Publisher: The Electric Studio

Address: PO Box 56, Luton, LU1 1TP

Price: £9.95

Publisher: Leisure Games

Address: 3 Monks Row, London W1R 4E2

C16



C16



AMSTRAD



SPECTRUM



ROBOT RONNIE

Score the robot's job is to collect sub-machine links from the levels and ladders, while avoiding the paralytic Murks. He must collect all the links before the time limit runs out. On each new level, there are more links to collect, and the time limit is not so long.

Keys

Z: left
X: right
C: up
V: down

Variables

6% score
8% level
14% lives
17% accumulator collected
8% time limit
17% is linked down?
50%, 5%: Ronnie's coordinates
600%, 60%: Ronnie's last coordinates
8%: did Ronnie move?
9%: Ronnie's leg ending
600%, 60%: Murk's coordinates
80%: Murk's last coordinates
11%: high score array
600%: high score's status array
60: Murk
60, 60: Score
6%: new score
F: start of score array

New & works

76-104: introduction
104-126: start loop
126-138: Ronnie procedure
138-400: Murk's procedure
400-440: draw screen procedure
440-450: initialization procedure
450-455: new level procedure
455-458: end procedure
458-459: out of array
459-1200: high score procedure
1200-1340: program driver
1340-1345: music procedure



Anti-matter, the stuff your mother always warned you to avoid, threatens to smother Robot Fannie on his rounds of the levels and ladders in HCW regular Stephen Gray's new BBC game

```
10 REM *****
20 REM 1 Robot Ronnie
30 REM 2 By Stephen Gray
40 REM 3 BBC Model B
50 REM 4 B&B-type
60 REM *****
70 END
80 MODE7:PROC Init:PROC High:PROC Main
90 GOTO 1000,1000,1000
100 MODE2:PROC Screen
110 BS:1,4,4
120 TIME=0
130 PROC Ronnie
140 PROC Murk
150 IF BS=1:BS=2:PROC Level:GOTO 300
160 VDU4:PRINTTAB(1,1):IF BS=TIME DIV 100:PRINT"0"
170 PRINTBS-TIME DIV 100:VDU5
```

[illegible]

P E R G E E A M

[illegible]

"An capsule would be complete without some kinds of savings as they are always very useful as a guide for beginners to programming. Any book by Tim Hartwell can be recommended and I think that there are about 18 of them!"

James doesn't do anything by halves and if you think his book has been quite long wait for the list of software. If we carry on like this BBCW is going to have to have a larger tape capsule book just to fit all Mr Lottrey's original recommendations.

The software companies will contain several titles, all from big name software houses. I'd have Arrand from Harpex because it was rapid programming. Amiga as a company were good and good

at Hope too but eventually became too entangled with the magazines. Any of Unsworth's titles should go in — but especially *Amiga Attack* — because of the overall quality and Unsworth's image. Add Aamck from Quakehive impressed me for two reasons, I like both Fisher and Aamck. I enjoyed Midbourne. Harner's Hobbes advanced adventure immensely and for pure good fun I would want to include one of Mike-Guy's 'Wally' series. Finally I would want to include the Game Designer from Quakehive. It is so good that anyone can make a good game simply and quickly.

From games capsules, James turned his attention to video courses and some of the

Seeing is believing

FIREBIRD



television programmer that have focused computers over the last few years. I passed him down on this one and told him that there was only room for our video so he had better choose carefully. He eventually decided on the early edition of Micro Line in which the bookers portrayed the machine that John Galt was trying to use. "It is an excellent analogue type programme and, without a doubt, the best presented of the complete bunch."

"What I don't understand is why Chris Sharp from BBC refused to use it (and hence then any other programme to accompany an open capsule to computer and hence a better awareness thaty Harman was another and always gave you the impression that he was previously very appreciative."

We went back to the whole range of peripherals and how James would fill the space of the capsule. "The most important peripheral for any computer owner, unless they own an Amstrad CPC400 or less, is Harman's introduction books. They ought to sit on his top shelf as well as my set up. The other peripheral that should be provided is the RS232, which isn't as interesting really, it is a living room with

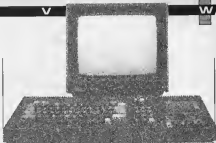
a life of its own. I think that it should be the star of a TV series too."

Other peripherals that James recommended are the Rampage speech generator and his favourite Zenith and a cheap cassette recorder. "The danger the better, one from Harner or Deane, all the recommendation of great records is necessary."

We gave a few more recommendations but peripheral that definitely wouldn't go into the capsule. "The Commodore 1941 also drove a awful. I have the feeling that, if a user did a speed comparison of the same game on a turbo load cassette and on the disc, a huge number would be returned to the shops."

The last few spaces in the capsule would be taken up by the following list which James believes are needed to enhance any small computer use, saving places — to control all the eye area, a Swedish chair — to help sing back again, Canadian Air Force members — to get the body working again, and two pencils and a piece of paper which, according to James, "beats all the other equipment in the time capsule hands down. All you need to use that as a good friend."

STICK AT IT



**David Martin has been looking at
Vollmace's Delta 32A Twin Joystick.
Did it give him joy or grief?**

Vollmace is a British computer manufacturing & sales range of peripherals for home computers. This is an offering for the Amstrad computers, though similar changes are used for all Vollmace joysticks, no even if you don't own an Amstrad, read on.

The rather grossly named 1/2 port on the back of an Amstrad, is really a standard 9 pin D type socket, in fact the port for two joysticks, providing you buy two of Amstrad's own JV-2 sticks. These have an extremely socket built in to enable you to connect the second stick into the first. As a result of the way it's wired, you can't even use a standard stick on the second one either, so you're stuck with spending just under £30 on the official units, which isn't too great when you consider the quality of the Amstrad sticks is comparable to the mostly renowned Komprice and Arcade sticks, both of which feature pressure action mechanisms, a real benefit Vollmace to the rescue!

What you get for your money is a really adaptive which plugs into the computer, but which has two finger pads incorporating standard sockets. Into these you plug the Vollmace units. You then have the facility to use the two sticks independently. One is JOY 0, the other JOY 1, which controls certain keyboard keys. I only wish that Vollmace make the available as a separate option for all those of us who already own joysticks. Very nice and very clever!

The sticks are an unusual wedge shape in cross section, the top being flat and having no less than three very small flat buttons in an upside of black tough metal. The stick itself is similarly small, almost defence Commander's job for fingertip control, not hand-held wrestling. The base, which bears no rubber feet, is removed easily and reveals several supporting brackets, and the reason for the exposure of metal on the top becomes clear. The first button are mounted at the top of a blanked off key pad capable of handling 44 buttons. A steel pressed circuit board of good quality is connected to a rubber membrane pad to make contacts, but the "feel" isn't great.

The biggest surprise of all, however, was in the other end, what looked like one good potentiometer, like little volume controls — though I am assured they are in fact two-way potentiometers.

In function, the Amstrad, two sticks are connected to the CPC's I/O socket. Such an arrangement must be advised carefully during manufacture as that such directions require, and one saw pre-production stick, the job hadn't been done properly. I took a good 30 minutes of fiddling before I got it right. The delicate plastic mouldings used to mount the pots and transmit the direction of the stick stick appear to be laser cut, into position as a very half-baked button. Though on the later production job,

the problem seems to have been resolved.

Returning the stick to its proper place, the sticks were given a work out. As a result of the lack of firm, they shake when we use a good deal, hand held, they are acceptable for an adult hand, but the rectangular shape isn't really comfortable. The stick itself is really a two finger control job, but the amount of movement is accurate, 45 degrees from vertical. As a result, although the two coil springs do a good job in returning, a 90 degree movement is called for to go from left to right. To be fair, the developer does appear with less than five degrees, but this is rather inconvenient, and there's no "zero" to confirm the direction you're selected.

There sticks would be useful as the computer for a graphics program with the buttons on the pad programmed to change colour, switch features, etc. when the stick would be really great for controlling a board game with a track. Given the nature of the Amstrad stick, however, this is not possible.

For games on the Amstrad, though these sticks are much better than the QuickStick II in every respect, I still prefer the ruggedness and positive feedback given by the recently reviewed Datasat Arcade with its strong contacts.

D.M.

Price: £12 each (splitter £4.99)

Publisher: Vollmace

Address: Park Drive, Farnborough, Hants, SO7 6EW

AMSTRAD



MACHINE CODE — THE EASY WAY



In this last part of his series David Ellis cures your printer problems and gives you his parting advice

Let me promise you a program to cure those last few problems on your printer — assuming that you have a printer of course! If you don't have a printer, good on you — you may find some useful tips.

First, what is the problem with the line feeds though? Quite simply, the Amstrad at the end of each line sends both a carriage return + line feed (ASCII code 13) and a line feed (ASCII code 10) — hence two line feeds are input giving the familiar double line spacing of all output to the printer. On some printers you may be able to set the dip switches to cancel the line feed, although on the EPSON printer that I used this did not seem to cure the problem.

The suggested cure is to put your 14 on the printer lead. But do you know which way is number 14? Well even if you do find it, can you leave yourself note that Stanley Kaufi? Fortunately the solution can be a lot simpler — wherever the character data are being sent to the printer via the jumpblock, and when the line feed character comes along (number 10) change it to zero.

A zero character sent to the printer will have no effect so now you will only have a single line feed being issued for each carriage return. A right problem does arise though. What if you do want to send the

character 10 to the printer? On my Daewoo printer, for example, 10 characters to the left (which is one of the standard patches used) is set by the following code:

```
POINT 00, 0000FF, 0000FF, 0000FF
```

CH0000FF is the machine code, CH0000FF is recognised by the printer mapping it to set the character block to the number that follows. This is set to 1/120ths of an inch, so the first 10 will set it to 11 CPH. However, each time 10 comes to the printer it will be changed to zero, which on my printer sets the character block to 120/120ths of an inch — you now two inches per character which was not what was wanted!

The way to cure this problem is to pick an ASCII character that is not often used (in this article the space left bracket — ASCII 94) — check for it being sent to the printer, change its value to 10, and then send it to the printer. The ASCII line would then appear as —

```
POINT 00, 0000FF, 0000FF, 10FF
```

Having discussed the theory, let's see how to write the machine code program to perform this.

The routine that reads a

character to the printer is located via the jumpblock at A701B. This address will need to be "patched" to point to our machine code program. The last article explained how this was

done. Listing 1 shows the machine code program to check for the value of 10, and change it to zero, and the value of 94 and change it to 10. Note that the relative jumps are all forward ones. The displacement value is easily calculated by writing your count as zero and from the zero instruction. Remember that 127 is the largest forward jump that you can make using the JE instruction.

The three bytes starting at A701B are those that were originally in the jumpblock — a return to the routine in ROM at A67F2. The code from A7041 to A704C puts the address of our machine code routine at A7030 (0000) into the jumpblock, and also the JEFF instruction (94) — the jumpblock has therefore been

patched and will jump to A7030.

You would replace this with the following FORK2 if you like —

FROM 00011,101 : FROM 00011,100 : FROM 00011,071

but this is a style or machine code programming so it would be preferable to use the latter method!

The DATA lines for the BASIC loader will therefore be:

Write more confidence. Don't fall into the trap of trying to write everything in machine code just to prove that you are better at it than your classmate. You should only resort to this when speed is needed — such

by the turn of the century most low level programming (if not all) will be compiled from high

level languages and that will make today's high level look like low level!

FROM 00, 0004771/0004771/0004770

When you have RUN the BASIC loader to put the machine code numbers into memory you will need to push the joystick with CALL 0001. You should now find that your printer has had problems are solved. If you wish to reset the joystick for any reason then a CALL to 0001 will accomplish this.

Now that's about it for this series. I hope that you have learned enough to enable you to tackle some of the machine code tricks available with a

as an arcade game — or where the timing is critical — such as with cassette operations. Using it to store memory is becoming less important as the bit of RAM available in modern computers increases.

That is where it is impossible to perform the operations in BASIC — the greater routine given here brings a good example. Otherwise, if the program can be done in BASIC, or otherwise high level language you are using, then do it in this language. I would suggest that

LIBRARY

0700	17 00	200 00	2	to be a line feed
0710	18 00	000 00	3	go to 000 00 if not
0720	19 00	00 00	4	to be 00 as change to 0
0730	20 00 00	00 0	5	when the next 101
0740	000 00	17 01	200 01	2 to be a instruction
0750	18 00 0000	00 0	2	when next 00 17 not
0760	19 00 00	00 00	3	to be 00 as change to 00
0770	0000	007 0070	007 000 007	2 send character to printer
0780	10 0 100	00 100	2	100 to the 100 space
0790	10 00001,0	00 000 000	2	replace 007 to joystick
07A0	10 0,0700	00 000 000	2	address of new routine
07B0	0100001,0	00 000 000	2	replace joystick address
07C0	007	000	2	return

Unitsoft



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SPECTRUM

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In yet another missive from the dungeon, Peter Sweeney looks at Dun Darach and Tinderbox and tries to help those players sinking and calling for a hand

Spare a thought for me as you tune to the radio: you are still here, perhaps almost forgotten, in the very heart of Algonkian. Anyway, the editor told me I've been writing you much, so enough of the random idle chit-chat, and straight on to the reviews.

game are good?

It is called *Tinderbox*, and based upon the well-loved fairy tale of the same name. In a far away land, there lived a king. One day he had a daughter, and was delighted, until a famous seer predicted she would marry a common foot soldier. On hearing this, the king expressed

remorse of the above story, which is not only entertaining to read, but also gives essential clues — indeed the whole under of action. One of the features I particularly liked, also available in the actual game, was the ability to change background colour at the touch of a button. This is a good idea which other companies should emulate.

The game itself? Well I've been trying to get off any criticism of a product which is in such a worthy cause, but sadly I must say that *Tinderbox* is a great disappointment. It shows little of the professional graphics that Graffiti has known for. Presentation is dull, and even the graphics' rather good characters are rather than a more pleasant reinforced one. Graphics are drawn for many locations, although they are hardly artistic masterpieces, being small. They appear to have been made up of professional characters, rather than drawn to be like The Hobbit, or styled to memory as in *Legend*.

These words would not make a bad game — which would the first test or real test of instruction. No, the real let-down is the vocabulary, and the computer's responses. Very few are understood. Some examples in the gamebooks, the verb *PAUSE* is not accepted (answer: stop, say HELLO, you cannot READ a map, there is no HELP (odd for a children's game), and in protest, I found the response "I don't under-



Red. And is a marvellous example of how our industry can pull together in a common cause. As the time of its launch, Graffiti Graphics, the people behind *Master's Maze*, announced a low-price children's adventure. Obviously this is a wonderful game, but is the

ed his daughter to a tower, and together with a suitably wicked witch ruled the land cruelly. You play Tom, a wounded soldier, who arrives in this land and wishes it is his destiny to marry the princess.

On with one of the best in The Book, a fifty action or so



VENTURES

EASY-EDIT



AMSTRAD



**Using programmable keys, John
Kennedy's program sets out to make
life easier when editing on the
Amstrad**

There is no doubt that editors have programs on most machines in a rather obscure position. Typing in the program usually is reasonably easy, providing there is an AUTO command, but editing existing text by typing EASY and the line number down gets tedious.

A much better system would be one in which you could map backwords or forwards in the program simply by pressing a single key, allowing any lines to be edited. Fortunately on the CPC464 the presence of User-Definable Keys makes it possible to do this, with the aid of a small self-modifying Basic program. It is not good programming practice to use programs which modify themselves, but in this case it is the only solution.

Easy-Edit is used purely for

editing existing lines, not for entering new text. Overload of control you could call the line number as an existing line to create a new one. When the program is run, the screen is split into two windows.

On the left a line status area, on the right an information window which shows the current program length (including any data), and a remainder of the control keys which can be used.

Since the program works in 80-column mode, if you are using a colour TV and monitor it is a bit to turn off the colour control while editing. This makes a much more readable.

You will be asked for the start line number, which need not be an actual line in the program; will find the next

highest line if it doesn't exist. The lowest line number you can set is 11, so note that if you want to start at the beginning of the program.

Lines 800 and 110 in the program are handy for you to play around with. Any existing program you want to use with Easy-Edit must be numbered higher than line 11, allowing Easy-Edit to be installed in.

To move around the program, simply use the UP and DOWN arrow keys. If you try to go too far back in the program, you may come to line 11 but will be unable to go further back. This has not yet been altered.

If it there is no Easy-Edit a line to work on if there is no other program in the machine. Editing of any line is done as normal, except you press the up or down arrow when the line is finished, instead of Enter as normal. If you do press Enter by accident, or drop out of Easy-Edit for any other reason, simply press the down arrow to go back in.

SPECTRUM PUNTER



Get on edge over the bookie with Ray Elder's Spectrumsed horseracing forecaster

This program developed out of an idea, specifically for a friend that it would be nice if his computer could store all the info he needed for his racing bookie.

I was interested in this, as when more appropriate software for a computer is there then storing more information and using it to make a forecast?

Ideally the computer should store facts about all the variables associated with racing, times, trainers, jockeys, course type, going, time, etc. It can be seen obvious that a massive amount of storage was going to be required and it would be a full time job just entering all the data on a daily basis.

Although I give up the idea of an in-depth data bank (forecaster I have a training companion that could be done).

Meanwhile I wrote this very simple program which makes a rough assessment based on day

to day information as given in the daily newspapers. I tried to include all the factors I take into consideration when I make my regular, annual visit to the bookies for the Grand National and, having entered them used to give them appropriate

"weights" values which are added to a running total — simple!

Now as everybody gives the same weight to the same factors, so I will explain mine and how you can adjust them to suit your own preferences.

How it works

The weighting is done as follows: 130 for 139, 1 for 140, 1 for 141, 1 for 142, 1 for 143, 1 for 144, 1 for 145, 1 for 146, 1 for 147, 1 for 148, 1 for 149, 1 for 150, 1 for 151, 1 for 152, 1 for 153, 1 for 154, 1 for 155, 1 for 156, 1 for 157, 1 for 158, 1 for 159, 1 for 160, 1 for 161, 1 for 162, 1 for 163, 1 for 164, 1 for 165, 1 for 166, 1 for 167, 1 for 168, 1 for 169, 1 for 170, 1 for 171, 1 for 172, 1 for 173, 1 for 174, 1 for 175, 1 for 176, 1 for 177, 1 for 178, 1 for 179, 1 for 180, 1 for 181, 1 for 182, 1 for 183, 1 for 184, 1 for 185, 1 for 186, 1 for 187, 1 for 188, 1 for 189, 1 for 190, 1 for 191, 1 for 192, 1 for 193, 1 for 194, 1 for 195, 1 for 196, 1 for 197, 1 for 198, 1 for 199, 1 for 200.

Line 154 adds 10/20/30/40 or 50ms equal for each of the jockeys, trainers and personal ratings. I is top rating 5 is the worst. I added "personal rating" so allow user influence due to any personal factors i.e. you like the name!

I use it if a jockey and trainer only have one race in a meeting. I reckon they'll be trying harder! If you don't want to add a personal weighting and enter the same number (1 to 5) for all the horses in the race.

Line 155 adds or subtracts a value depending on the state of horses before or otherwise to the number of horses running. This number will vary depending on the field. If only two horses are running and one has beaten the other, the difference factor will be 20. If you don't want to use this just enter 0 for each runner.

Line 157 adds or subtracts 30 depending on the state of the race. If a horse has taken a large drop or increase in class (more than 3,000) it is a big effect on performance. Enter 0 for all horses if you do not want this to be taken into account.

Line 158 adds a value related to the maximum of 5 depending on how many runners have chosen this horse. If you don't want this option to influence the assessment enter 0 for all runners.

Finally line 159 allows for a random factor to be added up to 100 to each horse individually to simulate "luck". Enter 0 if not required. It adds a 10 to horses with no previous form.



Making an conversion

Now there may be factors which you may want to add, perhaps weights etc, these may be included by adding the question to the data base in 9430 onwards (reading start 9900 is the base of all the data lines), and following it by the top value which the user may expect.

Now increase the loop time at line 130 by one for each extra question and add an $1/4 \times = 34/10/100$ line from 100 to 170 — converting the B2M, modifying the value of "a" which will be returned from the input routine before a is added to the total.

As I said at the beginning, this is a PLM program and it does not advise against to put the family harnesses in the pasture. Let us raise each to ten on the forecasts made by this program, however the odd 10g feet may add to the fun. If anyone does succeed in modifying or extending it so that it has a high success rate about 74% produces a copy, just as a matter of record of course!

1 REM pointer

```

87 REM *****
88 REM Initialise race factors
89 REM *****
90 RESTORE DATA: GO SUB 1000:
LET a=0
100 GO SUB 1000: LET b=a
105 GO SUB 1000: LET c=a: IF c=
0 THEN LET c=1
106 REM *****
107 REM Set up stores
108 REM *****
110 DIM x(10),i,j: DIM a(1)
117 REM *****
118 REM loop for no. of horses
119 REM *****
120 FOR i=1 TO 6: CLS: LOOP .2
,7
125 PRINT AT 2,0;"Enter details
of horse no "i": INPUT "Enter a
see of horse "i LINE x(i): PRIN
T AT 4,10;0;0
126 REM *****
127 REM loop for 13 questions
128 REM increase q if more
questions added
129 REM *****
130 RESTORE DATA: FOR q=1 TO 13
140 GO SUB 1000
147 REM *****
148 REM question weighting on q
149 REM *****
150 IF q=8 AND q=9 THEN LET a=
INT ((a*(12/q))/2.5)
154 IF q=8 AND q=9 THEN LET a=
10-a*10
157 IF q=8 OR q=9 THEN LET a=
INT ((a*(10-11)+10)/4-(q/7))
157 IF q=10 OR q=11 THEN LET a=
INT((a*(10-10)/8))
160 IF q=12 THEN LET a=INT ((a
/5)/4)
169 IF q=13 THEN LET a=INT ((
a/10)/4)
170 REM *****

```

```

166 REM all further question
values here.
167 REM *****
168 REM add to total for horse
169 REM *****
170 LET a(i)=a(i)+a
180 NEXT q: NEXT i
190 CLS
197 REM *****
198 REM print results
199 REM *****
200 FOR i=1 TO 6: PRINT a(i):
GOTO 110: IF a THEN LPRINT a(i):
GOTO 110
210 NEXT i
217 REM *****
218 REM all done, any more?
219 REM *****
220 GO SUB 1000
230 IF a THEN RUN
240 STOP
247 REM *****
248 REM all purpose input.
first read question and
input limit.
250 REM *****
255 READ a,b,y
265 LOOP .15,a,b: INPUT (a,b) LIN
E a,b: IF a=0 THEN GO TO 1005
267 REM *****
268 REM check for valid input
269 REM *****
270 FOR i=1 TO LEN a,b: IF a(i)
<"0" OR a(i)>"9" THEN GO TO 10
05
280 NEXT i: LET a=VAL a,b
285 IF a=0 OR a=0 THEN GO TO 1
005
290 RETURN
297 REM *****
298 REM initial race questions
299 REM *****
3000 DATA "Do you want a printou
t of the results (yes, no) "
,1
3015 DATA "How many horses runni
ng in this race ",40
3020 DATA "How many tipsters for
this race ",12
3027 REM *****
3028 REM horse questions
3029 REM *****
3030 DATA "How many wins in the
last five races ",5
3035 DATA "How many second place
s in the last five races ",5
3040 DATA "How many third places
in the last five races ",5

```


UFO SHOOT-
OUT

Alien spacecraft are coming to get you! Fight it out in Tony Guyon's game for the Amstrad

Use your trusty Blay in this UFO shoot-out game. There's a touch of satirism in the drawing of the attack, too. If you want to change the program to use any no. of keys, you can alter line 118.

Variables

X,Y: your base right
 R: alien fired
 A,B: co-ordinates for ship
 H1: hit
 A0: ship target

How it works

10-120: title
 120-150: 1000s
 150-160: on to screen
 170-200: music program
 200-250: introduction for the
 250-260: introduction for alien
 300-310: screen help to a
 310-320: position every time
 320-330: ship goes off screen or shot is
 lost
 330-340: end of game screen
 350-360: closed screen


```

3820 IF <140 OR >1320 THEN GOTO 3810
3830 RETURN
4000 REM*****END OF GAME
4010 CLS:LINE 3,7,24:PRINT DMC 3,5 :PRINT@1,"EMPTY"
4020 SOUND 132,0,0:FOR D=1 TO 3000:NEXT
4030 CALL 5000:ORDER @ DMC 0,0
4040 HOME :LOCATE 11,3:PRINT"YOUR LASER IS EMPTY"
4050 LOCATE 11,6:PRINT"YOUR MISSION IS OVER"
4060 GOTO 402
4070 LOCATE 5,14:PRINT"YOUR HITS TO SHOTS RATIO IS"ac/b"
4080 LOCATE 11,24:PRINT CHR(24)"ANOTHER GAME? (Y/N)"(5-00-024
4090 aa=UPPER$(BEEP)
4100 IF aa="Y"ORaa="y" AND aa<"N"THEN 4000
4110 IF aa="Y"THEN CLS:RUN aa ELSE CLS:END
5000 REM*****DRAW TRENCH
5010 col=1:yc1=100:yc2=110
5020 c1=0:c2=0
5030 DMC 1,0,0 DMC 2,c2
5040 CLS:FOR ac=10 TO 320
5050 a=INT(1000/40.5)
5060 PLOT ac+320,yc1,c
5070 DRAW ac+320,yc2,c
5080 DRAW 310=ac,yc2,c
5090 DRAW 310=ac,yc1,c
5100 yc1=yc1-0.5
5110 yc2=yc2-0.5
5120 IF yc1<100 THEN yc1=100
5130 IF yc2<100 THEN yc2=100
5140 aa=aa+1:320=yc1/240:74
5150 IF col+0.5=3 THEN col=col-2
5160 NEXT
5170 DMC 1,yc1:yc2:DMC 2,c2,c1
5180 SOUND 0,100,-4700,3,0,0,12
5190 RETURN

```



WIN AN ENTERPRISE 64 MICRO!

Digital & Micro ELECTRONICS

The Enterprise 64 is one of the very latest microcomputers to appear on the home market. It combines many features not found together in one small package. For example, stereo sound, 256 colors, built in joystick, wordprocessor, 64k memory — expandable to 400k!

The language is standard BASIC, as is the interfacing circuitry to printers and even local area networking. We like the Enterprise so much that we are giving you the chance to win one FREE in our easy to enter competition in our next issue.

This together with Audio Analyser, Syedram, CPC RS232 Interface, plus features galore makes buying Digital & Micro Electronics your number one choice.

On Sale Friday 18th July!



C64 USERS

Attention all C64 users! Listings will be simpler to type in due to the new standard that we have adopted from our sister magazine Your Commodore

Commodore brings us rather well known for the horrible black block that always showed. Unfortunately the graphics characters which are used to represent graphics and control characters, do not reproduce very well and they are also difficult to find on the Commodore keyboard.

For this reason HCW has to provide any control character with a brief statement on the previous line that explains exactly what the black block was meant to be. Unfortunately the graphics characters were not documented and this still causes some confusion. For

this reason we are listing the control and graphics characters in our listings.

In future all control and graphics commands will be replaced by a message within square brackets. This message is not typed out as printed in the magazine but rather the corresponding key or keys on the keyboard are pressed. For example [RIGHT] means press the cursor right key, you do not type in [RIGHT]. All of the keys, and what keys so poor and how they are shown on the screen are shown below.

Any character that is screened by pressing shift and letter will be printed as (n LETTER)





































(n A) shift and A
(n C) shift and C

Any character that is screened by pressing the Commodore key and a letter will be printed as (n LETTER)

(n A) Commodore & A
(n C) Commodore & C
(n I) Commodore & I

Any control key will be printed and as a number. For example [001]. Control codes are accessed by pressing the CTRL and a letter at the same time [001] is CTRL & A, [002] is CTRL & B etc. See the manual for more information about control codes.

[000] CTRL & A
[006] CTRL & Z

 CUR	 DEL	 R	 CUR
 SPACE	 RVS SH	 LVS	 CUR E END
 TAB	 RVS DEF	 CUR HOME	 CUR E END
 LVS	 H	 CUR UP	 CUR E END
 RVS	 E	 CUR DOWN	 CUR E END
 CUR L	 H	 CUR RIGHT	 CUR E END
 CUR R	 E	 CUR LEFT	 CUR E END
 H	 E	 INSERT	 CUR E END
 CUR	 DEL	 DELETE	 CUR E END

SWIMMING



*It's time to climb
into your costumes
and test the water
in this two player
game from
Stuart Smalley*

swim2 holds shape of the
swimmers travelling towards
the left
swim1 holds shape of the
swimmers travelling towards
the right
swim3 carries swimmers
shape

This game, for the BBC computer, consists of taking a swimmer against another player on the computer. The swimmers are controlled by pressing the 'W' and 'Z' keys alternately, and turned at the end of the track by pressing 'S'. The second player uses keys 'J' and 'K' to move and 'L' to turn. These keys can be altered by changing the 'KEY1' value in line 143 to 86.

If two players are already matched, the computer can assist the weaker player. This is done by selecting a new player game and pressing a reset. This is a high difficulty level. The keys can be used as normal but the computer will also turn the swimmer when a corner is at the end of the track, and depending on the difficulty level, will speed the swimmer slightly.

Once the program is run the number of players and level of difficulty is input. These may be altered at any time by pressing 'Escape'.

Variables

CP% is time if one player game
PL% number of player moving
DP% difficulty level
L% number of lengths
PL% number of player lengths
SL% a swimmer
YL% a swimmer
ARM% direction shape of
swimmer and swimmers players
press keys alternately
swim1% direction of swimmer
length% number of lengths
completed

```

10REM      STUART SMALEY, APRIL 1983
20040 END OF 800=17 25000000000000000000
PRINT " AT 11:00 1:00:00:00"
30=0000
40IF 251=754134:PRINT
50PRINT
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```


The Mastertronic User Magazine

Tronix



**Immerse yourself in Mastertronic's info
by taking up our discount offer for
membership of the new Tronix club**

Mastertronic, the budget software label, has recently launched a new club for all its fans and as a special offer for H&W readers we now give you a discount on the membership fee.

Members of the club will receive a quarterly high magazine called Tronix, packed full of interesting content for computer fans. For example the first issue will feature full details, photos and reviews of the new Mastertronic titles, including *Monstersquash* and *Clayco's Cops*.

There will be a full length story in each magazine and the chance to enter interesting competitions. The price of the first magazine is a full on of Mastertronic titles for your machine and the chance to win a really cool prize. In case you haven't already guessed, all you have to do is design an original game idea for a new Mastertronic title.

Added on all this there will be readers letters, jokes and puzzles. In all it looks very similar to H&W but only quarterly.

Each new member will also receive a free Tronix badge and a free Tronix pin in their membership pack.

There is one other free gift, and we have saved the best until last! Each new member can choose one Mastertronic title, from the full list, as a free gift! This means that your membership of the club costs you nothing. Mastertronic games themselves sell for £1.99 in the shops.

In all, club membership at £1.99 would be a bargain but with our exclusive special offer we can give you a discount of 30p making the whole package

just £1.69, even less than the cost of a Mastertronic game!

All you have to do to take advantage of this offer is follow the instructions on the coupon and then you can look forward to the pleasure of receiving the first issue with your new members pack. Orders can only be accepted, at this rate, with the original coupon from H&W, photocopies cannot be accepted.

30p OFF

Send this coupon to Mastertronic and get 30p off the subscription fee of £1.99. This means it's cheap or postal order for £1.69. Add you to a free game, the quarterly Tronix magazine, a free Tronix badge and a free Tronix pin. Don't delay - send today and join Tronix the Mastertronic user club.

Name _____

Address _____

Age _____

Computer _____

Allow up to 3-5 days for delivery

The Mastertronic
User Magazine

Tronix



Incompatible

Does HCW stand for "Home Club Weekly"? So, Mr. John Logan, HCW 118 would like to know my age. Well I am 40 years old.

I am rather disappointed to read that he was "What is there about these computers and golf?" Surely this should have read: golf and computers, especially if the target is to make an impression.

Pay to own an Astaire and not a Gai (like me) otherwise he would have got out computer together and made some fine music (what?)

Karen Polya, Hythe

All for MS

I am writing a few words in aid of you & the club that is now available only to MS computer owners. I produce a monthly computer-based magazine which offers advice as well as game playing skills. I couldn't help writing this letter when I received a free no advice about the MS in a recent issue of HCW.

The manuals for the MS are distributed to say the least but I have sought the facts and the technical advice from the Spectrum magazine and so am writing to take the user through the maze of MS.

You published a letter of mine in HCW 118, where I said that I was writing a book on the MS, well the book is going strong and mine in the MS is getting up there to it. It is an enormous task but has contributed to my career.

My letter has been in the MS Club corner.

Jeff Anderson, 18 Cornhill
Barnes, Middlesex,
Weybridge, Northampton NN2
BT

Reviews reviewed

I have been looking your magazine since January 1984. However I feel that the usual high standards of the magazine have begun to fall.

Firstly, the reviews section. Although this covers a wide range of users the reviews are not very thorough. I think a great improvement could be made if fewer reviews were done allowing them to be more detailed and the inclusion of expert short, professional reviews, would be an added bonus.

Also why don't you introduce the "One Minute View" feature as I'm sure they would be popular. Games listings are of little use and should be abolished. I don't believe that more people play than in some other commercial games have marked such a high standard. However I think you should continue to include reviews and machine code reviews as they are often very useful.

Overall my criticisms are only minor points, the magazine is well informed and the competition excellent.

W D Becker, Tyne and Wear

Computers take turns

Are HCW readers puzzled? Look this question because in the last few issues of the I have read in your letters pages are these like:

"You're got a windows system the Spectrum?" or "Your magazine is anti-Spectrum?" If you say it's about so many computers, why read it?

Seriously though your magazine is the only one I know of which does give an unbiased look at many popular computers. What does Computer Editor, HCW 118, mean when he says you have a bad attitude towards the Spectrum? That's his own prejudice. HCW 118 in the past 12 months or so the Spectrum has dominated your pages, and I'm not complaining. Now it's time for another computer to have its turn.

And John Hancock must not have seen the HCW since only one or five weeks ago when the review was about 70 or 80 and Spectrum, again then.

Philip Cox, Sharnbrook Post

Reach for the sky

Having read your review of Skyjet for the Commodore 64, I noticed that you didn't know how to play it.

Given the game itself, and although the instructions are very brief, I have worked out the idea and some tactics.

The idea is to collect the radar equipment and drop it onto the construction platform. Then of all, to pick up the radar equipment so you have to do it lead on top of its position on the ball. Easy!

Then the equipment is automatically picked up. Once picked up, the radar equipment you carry enables your ability to launch. Once over the construction platform, you drop the equipment using the same method as it used to launch. You can't miss the construction platform unless the equipment is destroyed in mid-air by the airborne reinforcements.

To launch, the only possibility is to build down the line between the pylons. After about four pylons of missiles a launch will be released. On the first level the submarine has to go from one end of the landscape to the other and back. But on the lower levels the ship is halved so it only has to go to the other end of the landscape once.

One way to destroy a submarine is to actually lead on the water and keep it between the ships until the submarine comes along — those boats in the thing you must be careful of is that if you have landed on a ball, and you launch, you will be destroyed.

After all you ask me the idea is not very difficult, and competing with that no End Over Midge.

So just it really is a very good game if you can work out the way to play it.

William Lusk, Middlesbrough

Home Computing Weekly
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London W1R 3AB

LETTERS PAGE

HAGO'S ACTION
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**A chance to enter a new era of
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Setup completed on the floor in front of your screen and the only could be a thing of the past if you are the winner of this week's prize.

Hago are offering one of their Personal Computer Workstations to this week's competition and all the optional accessories that go with it too. This makes our prize worth over £80 to the winner.

Each of Hago's workstations is built to an extremely sturdy design and fitted to distinctive frames with associated desk worktops. There are shelves for the VDU, the keyboard and for accessories. The copy holder allows easy typing of program listings by holding the manuscript at the correct height and angle.

In keeping with the true principles of ergonomic design the unit has adjustable shelves so that any size of system can be incorporated and the unit can be adapted for different users too.

The Basic Workstation normally costs £69.95 but with the optional shelf and copy holder this price is worth over £80 and is just missing for the winner of this week's first to start competition.

How to enter

This week we want you to think carefully about the advantages of owning a Hago workstation. Below we list an advantage and we want you to decide what order our reader would put them in.

Each card has a letter so when you have decided on the order write the appropriate letter on the entry coupon and fill in all

the other details.

Post your entry, sealed in an envelope, to: Workstation Competition, Hago Computer Weekly, No 1, Grafton Square, London W8 5AB, to arrive not later than five pm on Friday 9 August 1983.

The advantages

- A The copy holder makes the typing of listings easy
- B The computer display is at a safe distance from the user
- C The shelves are tidy and tidy
- D Fully adjustable shelves fit more systems and users
- E Ergonomic design reduces fatigue
- F The strong and stable base has casters to make movement easy

The rules

• Entries will not be accepted from employees of Hago, Hago Computer Publications and Address Partners & Sons. This includes also readers employed in Britain and agents of the companies.

• The draw is made random in the post office.

• The value of a drawing is fixed and no compensation can be claimed later.

Hago Workstation Competition**Entry Coupon**Name Address

Complete clearly and fully... if you are the winner, Hago Computer will finance your system (and Post for replacement computers) immediately. No 1 Grafton Square, London W8 5AB will arrive by five pm Friday 9 August 1983.



P E N

On the Amstrad CPC and the IBM, editors for each PWS may be sent to their default rules by using the command: CALL \$BPPY I have found however that if the Amstrad is in Mode 8, CALLING \$BPPY causes an effect similar to partially rewriting to MODE: 1. i.e. it looks as though MODE: 8 and I have been misad giving for instance 38 columns (as in MODE: 8) with MODE: 1 size characters.

In programs I write therefore, I usually include the line 38 ON \$BPPY CODE: 1000 at the start of the program and 3800 MODE: 8: CALL \$BPPY at the end to prevent the program being stopped leaving the user with an enhanced set of files.

I hope these tips are of use to you and your readers.

J M Constable, Aspley, Leicestershire

Thames Television Database Micronet 800 Crossword Competition Week Four

Final Clue

Part A

The Cobb has needed what familiarity breeds for at least seven hundred years, and it is not likely to ever see much more to it than a long line of old grey walls that throw stuff against the sea. In fact, once a ship will sport from the main town, a tiny Pinner in a microscope. And yet, they seem almost to turn their backs on it. Certainly it has not been enough to repair through the century to justify a certain excitement. But as a last temptation, or more disconcerting eye, it is quite simply the most beautiful sea support on the south coast of England. And not only because it is, as the guide books say, reflection of

Reader's H-score table

Name	Game	Machines	Scores
David Chambers	Starable	C16	36,100
Crang Jones	Starable	C16	100,400
Paul Gault	Starable	C16	87,400
	Flax	C64	36,100
Mark Hardy	Ti-Innovator	Ti-99/4A	66,150
	Paros	Ti-99/4A	5,675,000
	Wordmania	Ti-99/4A	411,000 play
	Back Room	Ti-99/4A	100,110
		Ti-99/4A	112,600

Solution to last week's puzzle

16. Start each ship on the place to the left and the 2 across table to make 6,12,30, 2, 3 across 42 and 4 begin 10.

1-11. Follow each "Starable" from top to bottom and then the top of the row and the 7 down table to make 1,14,21... 3 across 42 and 7 begin 20.

22. Reverse each number and the 3 down table appears! 62 would have been too difficult to begin with 12.

seven hundred years of English history, because ships relied to meet the Armada from it, because Minerva landed beside it... but finally because it is a superb fragment of folk-art.

Primitive yet complex, dishonest but delicate, as full of subtle curves and volumes as Henry Moore or Michelangelo, and pure, clean, like a paragon of man. I imagine! Perhaps, but it can be put to the test, for the Cobb has changed very little since the post of which I write...

Part B

"A) the Great Norman Abbey

1000 AD.

The first Charles married, and eventually, died. Running through the town is the River Var. From the viewpoint rules on view there.

END OF COMPETITION

All entries must be sent to:

Home Computing Weekly/
Micronet 800 Competition
Dymore House
3 Herford Road
London EC1R 5ED

Closing date Friday 14th August 1982

The first 30 correct answers out of the top will each receive a prize free membership to Personal and Micronet 800 and the chance to receive the prize on the "DATABASE" program.

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Thames Television DATABASE / Micronet 800 Competition Entry Coupon

I think that the one word answer, derived from the clue is _____

Name _____

Address _____

post code

For your entry coupon to be valid complete on: Home Computing Weekly/Micronet Competition, Dymore House, 3 Herford Road, London EC1R 5ED. Returns for more entries to: 0105 26 3544x1000

READERS PAGE



"These days, my favourite things are in bits..."

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